Multi-Channel Filtering System for Transceiver Architectures

Abstract of the Invention

[0027] A multi-channel filtering system for use with a transceiver includes a front-end multi-pole, multi-throw switch, a back-end multi-pole, multi-throw switch, and a plurality of filters. The front-end switch includes a receive pole, a transmit pole, and a plurality of switch throws. The back-end switch also includes a receive pole, a transmit pole, and a plurality of switch throws. Each of the plurality of filters has first and second ports, each first port coupled to one of the switch throws of the front-end switch, and each second port coupled to one of the switch throws of the back-end switch. Using this configuration, filters of differing bandwidths can be switched in during signal reception and/or transmission, thereby tailoring the communication rate to the particular conditions.